



## MRI/Spectroscopy

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*You are scheduled for a magnetic resonance examination, also called magnetic resonance imaging (MRI), or spectroscopy. These are diagnostic tests and types of body scans that use magnets and radio waves (not x-rays) to take 3-dimensional pictures of different parts of the body. These pictures show any abnormal areas in your organs and tissues.*

**Preparation:** No preparation is needed before an MRI scan. But since the scan uses very strong magnets, certain people should not be tested using this technique. If you have a cardiac or neural pacemaker, aneurysm clip, metal shrapnel in certain places of your body, metal objects in the eye, or metal ear implants, you are usually not eligible for this test. Women who might be pregnant within the first trimester also are not eligible.

**Procedure:** The MRI machine looks like a large, open tunnel. You will lie on a stretcher, which will be moved into the MRI machine. You will then hear the thumping sounds of the magnet. Sometimes, these thumping sounds are loud, so you will be given earplugs before you go into the machine.

If pictures of your head are needed, a special small tube will surround your head. If a specific part of your body (such as your knee) needs to be examined, a special tube or pad will be placed close to that part of your body.

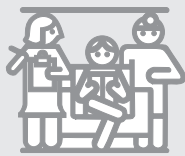
If MRI spectroscopy is to be performed, a circular or rectangular coil will be placed close to your body. It is important for you to lie very still throughout the scan. You will be able to talk with and hear the staff members conducting the test. Some patients fall asleep during the test.

You may receive an intravenous (I.V.) injection of a substance called a “contrast agent.” This substance makes the pictures clearer. If you have an allergy to a contrast agent, please notify the technologist doing the test.

Scanning lasts from 20 minutes to 2 hours. Most scans last from 45 to 90 minutes.

If you have any questions about these tests, please ask. Your nurse and doctor are ready to assist you at all times.

### **Special Instructions:**



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This information is prepared specifically for patients participating in clinical research at the Warren Grant Magnuson Clinical Center at the National Institutes of Health and is not necessarily applicable to individuals who are patients elsewhere. If you have questions about the information presented here, talk to a member of your healthcare team.

Questions about the Clinical Center? [OCCC@cc.nih.gov](mailto:OCCC@cc.nih.gov)

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